

**AMENDMENTS TO THE CLAIMS**

**This listing of claims will replace all prior versions and listings of claims in the application:**

**LISTING OF CLAIMS:**

1. (currently amended): A vehicle key system for verifying identity of fingerprint information about a user's fingerprint and for controlling pieces of equipment in a vehicle according to a verification result, said system comprising:

a transmitter including a fingerprint information capturing means for capturing fingerprint information from a user's fingerprint, an identifier storage means for storing an identifier specific to said transmitter, and a transmitting means for transmitting ~~only the fingerprint information captured by said fingerprint information capturing means, only a system-specific identifier previously stored in said identifier storage means, or both the fingerprint information and the system-specific identifier;~~ and

a receiver disposed in the vehicle, including a receiving means for receiving the fingerprint information and the identifier transmitted from said transmitting means of said transmitter,

a verification means for verifying the received fingerprint information against a list of pieces of previously stored fingerprint information, and for verifying the received identifier against a previously stored identifier, said verification means including feature verification means for verifying the features extracted from the fingerprint information received from said transmitter against features of an authorized user stored by said receiver; an identifier verification means for verifying the specific identifier received from said transmitter and the

specific identifier stored by said receiver, and comprehensively determining means for determining whether or not a user manipulating said transmitter is an authorized user and whether or not the manipulation is directed toward the vehicle corresponding to said transmitter; and

a control means for controlling said pieces of equipment in the vehicle according to verification results from said verification means.

2. (canceled).

3. (previously presented): The vehicle key system according to Claim 1, wherein said control means comprising engine control means for controlling an engine according to the verification result from said receiver, door control means for controlling a lock of doors according to the verification results from said receiver, and a trunk control means for controlling a lock of a trunk according to the verification result of the receiver.

4. (previously presented): The vehicle key system according to Claim 1, wherein said receiver further comprising:

a first operation means for selecting only the fingerprint information, only the identifier or the both of them according to a manipulation performed by a user,

a first verification data-selection state storage means for storing the verification data-selection state indicating a selection state of the verification data whose value is set by said first operation means and a selection state of the verification data received by said transmitter, and

a display means for displaying which information to be verified is selected from the fingerprint information or the identifier selected.

5. (previously presented): The vehicle key system according to Claim 4, wherein said transmitter further comprising:

a second operation means for selecting only the fingerprint information, only the identifier or the both of them according to a manipulation performed by a user, and

a second verification data-selection state storage means for storing the verification data-selection state indicating a selection state of the verification data whose value is set by said first operation means and a selection state of the verification data received by said transmitter.

6. (canceled).

7. (canceled).

8. (previously presented): The vehicle key system according to Claim 4, wherein an operation unit intended for operating a piece of equipment disposed in said vehicle also serves as said first operation means.

9. (original): The vehicle key system according to Claim 8, wherein said equipment is a navigation device.

10. (previously presented): The vehicle key system according to Claim 4, wherein a pedal disposed in said vehicle also serves as said first operation means.

11. (currently amended): A vehicle key system for verifying identity of fingerprint information about a user's fingerprint and for controlling pieces of equipment in a vehicle according to a verification result, said system comprising:

a transmitter including a fingerprint information capturing means for capturing fingerprint information from a user's fingerprint, an identifier storage means for storing an identifier specific to said transmitter, and a transmitting means for transmitting only the

fingerprint information captured by said fingerprint information capturing means, only a system-specific identifier previously stored in said identifier storage means, or both the fingerprint information and the system-specific identifier; and

a receiver disposed in the vehicle, including a receiving means for receiving the fingerprint information and the identifier transmitted from said transmitting means of said transmitter,

a verification means for verifying the received fingerprint information against a list of pieces of previously stored fingerprint information, and for verifying the received identifier against a previously stored identifier, said verification means including feature verification means for verifying the features extracted from the fingerprint information received from said transmitter against features of an authorized user stored by said receiver; an identifier verification means for verifying the specific identifier received from said transmitter and the specific identifier stored by said receiver, and comprehensively determining means for determining whether or not a user manipulating said transmitter is an authorized user and whether or not the manipulation is directed toward the vehicle corresponding to said transmitter; and

a control means for controlling said pieces of equipment in the vehicle according to verification results from said verification means~~The vehicle system according to claim 1,~~  
wherein if said verification means previously stores no fingerprint information, when the received information includes the system-specific identifier, said verification means performs only the verification of the received identifier against a previously stored identifier.

12. (currently amended): A vehicle key system for verifying identity of fingerprint information about a user's fingerprint and for controlling pieces of equipment in a vehicle according to a verification result, said system comprising:

a transmitter including a fingerprint information capturing means for capturing fingerprint information from a user's fingerprint, an identifier storage means for storing an identifier specific to said transmitter, and a transmitting means for transmitting only the fingerprint information captured by said fingerprint information capturing means, only a system-specific identifier previously stored in said identifier storage means, or both the fingerprint information and the system-specific identifier; and

a receiver disposed in the vehicle, including a receiving means for receiving the fingerprint information and the identifier transmitted from said transmitting means of said transmitter,

a verification means for verifying the received fingerprint information against a list of pieces of previously stored fingerprint information, and for verifying the received identifier against a previously stored identifier, said verification means including feature verification means for verifying the features extracted from the fingerprint information received from said transmitter against features of an authorized user stored by said receiver; an identifier verification means for verifying the specific identifier received from said transmitter and the specific identifier stored by said receiver, and comprehensively determining means for determining whether or not a user manipulating said transmitter is an authorized user and whether or not the manipulation is directed toward the vehicle corresponding to said transmitter; and

a control means for controlling said pieces of equipment in the vehicle according to verification results from said verification means,

wherein said control means comprises engine control means for controlling an engine according to the verification result from said receiver, door control means for controlling a lock of doors according to the verification results from said receiver, and a trunk control means for controlling a lock of a trunk according to the verification result of the receiver~~The vehicle key system according to Claim 3, and~~

wherein if said verification means previously stores no fingerprint information, when the received information includes the system-specific identifier, said verification means performs only the verification of the received identifier against a previously stored identifier.

13. (currently amended): A vehicle key system for verifying identity of fingerprint information about a user's fingerprint and for controlling pieces of equipment in a vehicle according to a verification result, said system comprising:

a transmitter including a fingerprint information capturing means for capturing fingerprint information from a user's fingerprint, an identifier storage means for storing an identifier specific to said transmitter, and a transmitting means for transmitting only the fingerprint information captured by said fingerprint information capturing means, only a system-specific identifier previously stored in said identifier storage means, or both the fingerprint information and the system-specific identifier; and

a receiver disposed in the vehicle, including a receiving means for receiving the fingerprint information and the identifier transmitted from said transmitting means of said transmitter,

a verification means for verifying the received fingerprint information against a list of pieces of previously stored fingerprint information, and for verifying the received identifier against a previously stored identifier, said verification means including feature verification means for verifying the features extracted from the fingerprint information received from said transmitter against features of an authorized user stored by said receiver; an identifier verification means for verifying the specific identifier received from said transmitter and the specific identifier stored by said receiver, and comprehensively determining means for determining whether or not a user manipulating said transmitter is an authorized user and whether or not the manipulation is directed toward the vehicle corresponding to said transmitter; and

a control means for controlling said pieces of equipment in the vehicle according to verification results from said verification means,

wherein said receiver further comprises:

a first operation means for selecting only the fingerprint information, only the identifier or the both of them according to a manipulation performed by a user,

a first verification data-selection state storage means for storing the verification data-selection state indicating a selection state of the verification data whose value is set by said first operation means and a selection state of the verification data received by said transmitter, and

a display means for displaying which information to be verified is selected from the fingerprint information or the identifier selected~~The vehicle key system according to Claim 4,~~  
and

wherein if said verification means previously stores no fingerprint information, when the received information includes the system-specific identifier, said verification means performs only the verification of the received identifier against a previously stored identifier.

14. (currently amended): A vehicle key system for verifying identity of fingerprint information about a user's fingerprint and for controlling pieces of equipment in a vehicle according to a verification result, said system comprising:

a transmitter including a fingerprint information capturing means for capturing fingerprint information from a user's fingerprint, an identifier storage means for storing an identifier specific to said transmitter, and a transmitting means for transmitting only the fingerprint information captured by said fingerprint information capturing means, only a system-specific identifier previously stored in said identifier storage means, or both the fingerprint information and the system-specific identifier; and

a receiver disposed in the vehicle, including a receiving means for receiving the fingerprint information and the identifier transmitted from said transmitting means of said transmitter,

a verification means for verifying the received fingerprint information against a list of pieces of previously stored fingerprint information, and for verifying the received identifier against a previously stored identifier, said verification means including feature verification means for verifying the features extracted from the fingerprint information received from said transmitter against features of an authorized user stored by said receiver; an identifier verification means for verifying the specific identifier received from said transmitter and the specific identifier stored by said receiver, and comprehensively determining means for



determining whether or not a user manipulating said transmitter is an authorized user and whether or not the manipulation is directed toward the vehicle corresponding to said transmitter; and

a control means for controlling said pieces of equipment in the vehicle according to verification results from said verification means,

wherein said transmitter further comprises:

a second operation means for selecting only the fingerprint information, only the identifier or the both of them according to a manipulation performed by a user, and

a second verification data-selection state storage means for storing the verification data-selection state indicating a selection state of the verification data whose value is set by said first operation means and a selection state of the verification data received by said transmitter~~The vehicle key system according to Claim 5, and~~

wherein if said verification means previously stores no fingerprint information, when the received information includes the system-specific identifier, said verification means performs only the verification of the received identifier against a previously stored identifier.

15. (canceled).

16. (canceled).

17. (currently amended): A vehicle key system for verifying identity of fingerprint information about a user's fingerprint and for controlling pieces of equipment in a vehicle according to a verification result, said system comprising:

a transmitter including a fingerprint information capturing means for capturing fingerprint information from a user's fingerprint, an identifier storage means for storing an

identifier specific to said transmitter, and a transmitting means for transmitting only the fingerprint information captured by said fingerprint information capturing means, only a system-specific identifier previously stored in said identifier storage means, or both the fingerprint information and the system-specific identifier; and

a receiver disposed in the vehicle, including a receiving means for receiving the fingerprint information and the identifier transmitted from said transmitting means of said transmitter,

a verification means for verifying the received fingerprint information against a list of pieces of previously stored fingerprint information, and for verifying the received identifier against a previously stored identifier, said verification means including feature verification means for verifying the features extracted from the fingerprint information received from said transmitter against features of an authorized user stored by said receiver; an identifier verification means for verifying the specific identifier received from said transmitter and the specific identifier stored by said receiver, and comprehensively determining means for determining whether or not a user manipulating said transmitter is an authorized user and whether or not the manipulation is directed toward the vehicle corresponding to said transmitter; and

a control means for controlling said pieces of equipment in the vehicle according to verification results from said verification means,

wherein said receiver further comprises:

a first operation means for selecting only the fingerprint information, only the identifier or the both of them according to a manipulation performed by a user,

a first verification data-selection state storage means for storing the verification data-selection state indicating a selection state of the verification data whose value is set by said first operation means and a selection state of the verification data received by said transmitter, and

a display means for displaying which information to be verified is selected from the fingerprint information or the identifier selected,

wherein an operation unit intended for operating a piece of equipment disposed in said vehicle also serves as said first operation means~~The vehicle key system according to Claim 8,~~  
and

wherein if said verification means previously stores no fingerprint information, when the received information includes the system-specific identifier, said verification means performs only the verification of the received identifier against a previously stored identifier.

18. (original): A vehicle key system for verifying identity of fingerprint information about a user's fingerprint and for controlling pieces of equipment in a vehicle according to a verification result, said system comprising:

a transmitter including a fingerprint information capturing means for capturing fingerprint information from a user's fingerprint, an identifier storage means for storing an identifier specific to said transmitter, and a transmitting means for transmitting only the fingerprint information captured by said fingerprint information capturing means, only a system-specific identifier previously stored in said identifier storage means, or both the fingerprint information and the system-specific identifier; and

a receiver disposed in the vehicle, including a receiving means for receiving the fingerprint information and the identifier transmitted from said transmitting means of said transmitter,

a verification means for verifying the received fingerprint information against a list of pieces of previously stored fingerprint information, and for verifying the received identifier against a previously stored identifier, said verification means including feature verification means for verifying the features extracted from the fingerprint information received from said transmitter against features of an authorized user stored by said receiver; an identifier verification means for verifying the specific identifier received from said transmitter and the specific identifier stored by said receiver, and comprehensively determining means for determining whether or not a user manipulating said transmitter is an authorized user and whether or not the manipulation is directed toward the vehicle corresponding to said transmitter; and

a control means for controlling said pieces of equipment in the vehicle according to verification results from said verification means,

wherein said receiver further comprises:

a first operation means for selecting only the fingerprint information, only the identifier or the both of them according to a manipulation performed by a user,

a first verification data-selection state storage means for storing the verification data-selection state indicating a selection state of the verification data whose value is set by said first operation means and a selection state of the verification data received by said transmitter, and

a display means for displaying which information to be verified is selected from the fingerprint information or the identifier selected,

wherein an operation unit intended for operating a piece of equipment disposed in said vehicle also serves as said first operation means,

wherein said equipment is a navigation device~~The vehicle key system according to Claim 9, and~~

wherein if said verification means previously stores no fingerprint information, when the received information includes the system-specific identifier, said verification means performs only the verification of the received identifier against a previously stored identifier.

19. (currently amended): A vehicle key system for verifying identity of fingerprint information about a user's fingerprint and for controlling pieces of equipment in a vehicle according to a verification result, said system comprising:

a transmitter including a fingerprint information capturing means for capturing fingerprint information from a user's fingerprint, an identifier storage means for storing an identifier specific to said transmitter, and a transmitting means for transmitting only the fingerprint information captured by said fingerprint information capturing means, only a system-specific identifier previously stored in said identifier storage means, or both the fingerprint information and the system-specific identifier; and

a receiver disposed in the vehicle, including a receiving means for receiving the fingerprint information and the identifier transmitted from said transmitting means of said transmitter,

a verification means for verifying the received fingerprint information against a list of pieces of previously stored fingerprint information, and for verifying the received identifier against a previously stored identifier, said verification means including feature verification means for verifying the features extracted from the fingerprint information received from said transmitter against features of an authorized user stored by said receiver; an identifier verification means for verifying the specific identifier received from said transmitter and the specific identifier stored by said receiver, and comprehensively determining means for determining whether or not a user manipulating said transmitter is an authorized user and whether or not the manipulation is directed toward the vehicle corresponding to said transmitter; and

a control means for controlling said pieces of equipment in the vehicle according to verification results from said verification means,

wherein said receiver further comprises:

a first operation means for selecting only the fingerprint information, only the identifier or the both of them according to a manipulation performed by a user,

a first verification data-selection state storage means for storing the verification data-selection state indicating a selection state of the verification data whose value is set by said first operation means and a selection state of the verification data received by said transmitter, and

a display means for displaying which information to be verified is selected from the fingerprint information or the identifier selected,

wherein an operation unit intended for operating a piece of equipment disposed in said vehicle also serves as said first operation means,

wherein said equipment is a navigation device,

wherein a pedal disposed in said vehicle also serves as said first operation means~~The~~  
~~vehicle key system according to Claim 10, and~~

wherein if said verification means previously stores no fingerprint information, when the received information includes the system-specific identifier, said verification means performs only the verification of the received identifier against a previously stored identifier.

20. (previously presented): A vehicle key system for verifying identity of fingerprint information about a user's fingerprint and for controlling pieces of equipment in a vehicle according to a verification result, said system comprising:

a transmitter including a fingerprint information capturing means for capturing fingerprint information from a user's fingerprint, an identifier storage means for storing an identifier specific to said transmitter, and a transmitting means for transmitting both the fingerprint information and the system-specific identifier; and

a receiver disposed in the vehicle, including a receiving means for receiving the fingerprint information and the identifier transmitted from said transmitting means of said transmitter,

a verification means for verifying the received fingerprint information against a list of pieces of previously stored fingerprint information, and for verifying the received identifier against a previously stored identifier, said verification means including feature verification means for verifying the features extracted from the fingerprint information received from said transmitter against features of an authorized user stored by said receiver; an identifier verification means for verifying the specific identifier received from said transmitter and the

specific identifier stored by said receiver, and comprehensively determining means for determining whether or not a user manipulating said transmitter is an authorized user and whether or not the manipulation is directed toward the vehicle corresponding to said transmitter; and

a control means for controlling said pieces of equipment in the vehicle according to verification results from said verification means.